

## **REMARKS**

In accordance with the foregoing, Claims 28-61 are pending in the application, Claims 28 and 38-59 being withdrawn, Claims 29-37, 60 and 61 are pending and under consideration. Of Claims 29-37, 60 and 61, Claims 29 and 60 are independent. No new matter is presented in this response. Favorable consideration of this application is respectfully requested in light of the following remarks.

### ***Objection to the Specification***

The Official Action objected to the Abstract of the Disclosure and Title of the Invention. Applicants respectfully request withdrawal of the objections to the Specification in light of the amendments to the Abstract of the Disclosure and Title of the Invention as set forth above.

### ***Objection to the Drawings under 37 CFR §1.83(a)***

The Official Action objects to the drawings under 37 CFR §1.83(a) for allegedly failing to show the drum link-up assembly connecting to both the combining machine and the tipping machine as described in the specification. The Official Action states:

(only connection to the tipping machine is shown). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

As stated in 37 C.F.R. §1.83(a) and MPEP §608.02(d), "conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the

drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box)."

Applicants respectfully submit that the description of "the drum link-up assembly connecting to both the combining machine and the tipping machine" is a conventional feature and not essential for a proper understanding of the invention. Moreover, paragraph [0143] of the specification recites that "[the double-action plug-tube combiner] DAPTC machine shown in FIG. 7, is hard-linked to the cigarette tipping machine 200 (shown in FIG. 9) by the drum link-up assembly." (emphasis added) Paragraph [0151] recites that "the output of the combining apparatus is a 2-up tobacco rod plug 164 which is directly linked to a catch drum 222 of the drum link-up assembly 220 at the entrance to a cigarette tipping machine 200 such as a Hauni Max that has been modified to operate in the manner as described with reference to FIGS. 10A and 10B. A preferred layout of the modified Hauni Max is shown in FIG. 9." From Figure 7, the 2-up tobacco rod plug from the combining machine can be seen in the catch drum of the drum link-up assembly in Figure 10A. Clearly, "the drum link-up assembly connecting to both the combining machine and the tipping machine" is illustrated in the drawings with sufficient detail to allow a proper understanding of the disclosed invention. As such, Applicants' drawings are in compliance with 37 C.F.R. § 1.83(a) and Applicants respectfully request withdrawal of the objection.

### ***Restriction Requirement***

Independent Claim 48, which is directed to an apparatus for manufacturing a cigarette was previously amended to depend from Claim 29, which is directed to an apparatus for perforating a tobacco rod prior to assembly of the tobacco rod to a filter

rod. As set forth in MPEP §821.04(a), where restriction was required between independent or distinct products, and all claims directed to an elected invention are allowable, any restriction requirement between the elected invention and any nonelected invention that depends from or otherwise requires all the limitations of an allowable claim should be withdrawn. Claim 28, which is directed to a method of making a cigarette, was previously amended to depend from Claim 29, which is directed to an apparatus for perforating a tobacco rod prior to assembly of the tobacco rod to a filter rod. Claim 38 which is directed to a method of perforating a tobacco rod prior to assembly of the tobacco rod to a filter rod was previously amended to depend from Claim 29. Claim 55, which is directed to a method of manufacturing a tobacco rod portion of a cigarette was previously amended to depend from Claim 38. As set forth in MPEP §821.04(b), where claims directed to a product and to a process of using the product are presented in the same application, if applicant elects claims directed to a product, which is subsequently found allowable, withdrawn process claims that depend from an allowable product claim will be considered for rejoinder. Upon rejoinder of claims directed to a previously non-elected process, the restriction requirement between the elected product and rejoined process will be withdrawn. Accordingly, once Claim 29 is found allowable, Claims 28 and 38-59, which depend from Claim 29, should be rejoined.

***Rejection under 35 U.S.C. §112 Second Paragraph:***

The Official Action rejects Claims 34 and 35 under 35 U.S.C. §112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Official Action states:

9. Claim 34 recites the limitation "the laser drum" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Applicants respectfully traverse the rejection for the following reasons.

Claim 34 as originally filed, recites,

34. The apparatus of claim 29, wherein the drum link-up assembly includes a series of drums which transfer 2-up tobacco rods to the tipping machine, the drums including a catch drum, a transfer drum, a swash plate drum, a laser drum, a cutting drum, and a separating drum, the catch drum receiving 2-up tobacco rods from a delivery device of a combining apparatus and delivering the 2-up tobacco rods to the transfer drum, the transfer drum delivering the 2-up tobacco rods to the swash plate drum, the swash plate drum aligning the 2-up tobacco rods and delivering the aligned 2-up tobacco rods to the laser drum, the laser drum orienting the 2-up tobacco rods such that the laser perforating apparatus burns at least two longitudinally spaced apart rows of perforations on each of the 2-up tobacco rods, the laser drum delivering the 2-up tobacco rods to the cutting drum, the cutting drum cutting the 2-up tobacco rods into a pair of tobacco rods of unit length and delivering the pair of tobacco rods to the separating drum, the separating drum separating the pair of tobacco rods longitudinally apart and delivering the separated tobacco rods to an assembly of a tipping apparatus at which the pair of tobacco rods are combined with a 2-up filter rod by placing the 2-up filter rod between the pair of spaced apart tobacco rods. (emphasis added)

The reference to "a laser drum" as indicated in the above by underlining provides antecedent support for the later mention of "the laser drum" (in line 8 as originally filed). As such, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §112, second paragraph and reconsideration of Claim 34.

The Official Action also states:

10. Claim 35 recites the limitation "the combining machine" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 35 has been amended to recite "the combining apparatus" instead of "the combining machine." Antecedent basis for "the combining apparatus" can be found in Claim 29. In light of the amendment, Applicants respectfully request

withdrawal of the rejection under 35 U.S.C. §112, second paragraph and reconsideration of Claim 35.

***Rejection under 35 U.S.C. §103(a):***

The Official Action rejects Claim 29 under 35 U.S.C. §103(a) as allegedly unpatentable over what the Official Action terms "admitted prior art". The rejection is respectfully traversed for at least the following reasons.

For a proper obviousness rejection, the Patent Office must provide "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" and not "mere conclusory statements." KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 82 USPQ2d 1385, 1396 (2007) (quoting In re Kahn, 441 F.3d 977, 988, (Fed. Cir. 2006)). For the Examiner to establish a factual basis to support a legal conclusion of obviousness, the Examiner must make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), KSR, 127 S.Ct. at 1734, 82 USPQ2d at 1391. The Official Action does not identify a reason that would have prompted a person of ordinary skill in the art to combine the elements of a conventional cigarette rod making machine, plug delivery systems, garniture operation, tipping machine, and perforating system in the manner recited in independent Claim 29. In addition, as stated in MPEP §2143, to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim features. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). The combination of features recited by the Examiner from the Applicants' own disclosure does not teach or suggest all the claim features of Claim 29.

Claim 29 recites, an apparatus for perforating a tobacco rod prior to assembly of the tobacco rod to a filter rod via tipping paper, comprising a drum link-up assembly adapted to transfer a tobacco rod from a combining apparatus to a tipping apparatus wherein the tobacco rod is attached to a filter rod by tipping paper, and a laser perforating apparatus adapted to burn one or more holes in an outer surface of the tobacco rod while the tobacco rod is in the drum link-up assembly.

Since at least the laser perforating apparatus adapted to burn one or more holes in an outer surface of the tobacco rod while the tobacco rod is in the drum link-up assembly element of Claim 29 is not suggested by "admitted prior art", Claim 29 is not obvious under 35 U.S.C. §103(a) and the rejection is respectfully requested to be withdrawn.

As stated in the Official Action, the prior art does not disclose a means for connecting a cigarette machine and a tipping machine. (page 5) Since the prior art does not disclose a means for connecting a cigarette machine and a tipping machine, the prior art cannot disclose a drum link-up assembly as recited in Claim 29. Furthermore, as stated in the Official Action on page 6, the prior art does not disclose a laser perforation apparatus in the connecting means. Since the prior art does not disclose a drum link-up assembly adapted to transfer a tobacco rod from a combining apparatus to a tipping apparatus, there is no reason one of ordinary skill in the art would have been motivated to combine a laser perforating apparatus with the drum link-up assembly to burn one or more holes in an outer surface of the tobacco rod while the tobacco rod is in the drum link-up assembly as recited in Claim 29.

The Examiner relies on Howard v. Detroit Stove Works, 150 U.S. 164 (1893) for combining two machines to form one machine, however, the cited case does not cure the deficiency of the missing claim elements. The Examiner also relies on St. Regis Paper Co. v. Bemis Co., 193 USPQ 8 (7th Cir. 1977) for the holding that mere duplication of essential working parts of a device involves only routine skill in the art. However, there is no duplication of working parts recited in Claim 29 and the cited case does not cure the fatal deficiency of the missing claim elements. In contrast to the prior art such as Nichols perforating a filter, Claim 29 recites a laser perforates a tobacco rod in combination with the tobacco rod in a drum link-up assembly. The laser perforation location in combination with the drum link-up assembly allows execution at a high rate of speed. (See, e.g., paragraphs [0015], [0025] and [0168]). The high speed laser perforation of the tobacco rod structure in the drum link-up assembly is novel, unobvious and patentable.

Based on the foregoing, Claim 29 is patentable over the "admitted prior art" and Applicants respectfully request withdrawal of the rejection and reconsideration of Claim 29.

Claims 29, 35, and 36 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 3,036,581 to Dearsley (hereinafter "Dearsley") in view of what the Official Action terms "the applicants admitted prior art". Applicants respectfully traverse this rejection and reconsideration of the claims is requested for at least the following reasons.

By way of review, Dearsley discloses an apparatus for making cigarettes. (col. 1, lines 1-13). Referring to Figure 1, mouth pieces (i.e., filters) 11 are fed from a hopper 10 to a plug receiving and conveying drum 26 where the mouth pieces 11 are

cut into double filter plugs 41 and transferred to plug separating drums 38 (40) (42), a plug aligning drum 56 and then to an assembly drum 72 between two lengths of cut cigarette rod F where a uniting band (i.e., tipping paper) T joins the two cigarette lengths F and double length filter plugs 41. (col. 6, lines 41-43). The cut lengths of cigarette rod F are received from a cigarette making machine (not shown) and placed on the assembly drum 72 by a kicker plate 83. (col. 5, line 71 to col. 6, line 16) The assembled cigarettes are transferred to a cutting drum 144 where they are cut at their centers into individual filter tip cigarettes and discharged onto catcher belts 154. (col. 8, lines 42-60)

On page 7, the Official Action states:

Although the applicant discloses that all the components are commercially known, prior art for using a drum to connect two different cigarette machines is not disclosed. However, Dearsley discloses an attachment for a cigarette-making machine that takes discharged cigarette rods and, using a conveying drum, cutting them and then further processing the rods by applying tipping material, thereby connecting the cigarette machine and the tipping apparatus. It would have been obvious to incorporate the disclosure of Dearsley with the disclosed commercially available cigarette making machine and tipping machine disclosed by the applicant because they are analogous art and solve the same problem. The motivation to do so would be to integrate two devices which would result in time and efficiency savings, as well as reduced damage to cigarettes.

Based on this language, the Official Action is not relying on Dearsley to supply the missing claim features of Claim 29 discussed above. Claim 29 recites, an apparatus for perforating a tobacco rod prior to assembly of the tobacco rod to a filter rod via tipping paper, comprising, *inter alia*, a drum link-up assembly adapted to transfer a tobacco rod from a combining apparatus to a tipping apparatus and a laser perforating apparatus adapted to burn one or more holes in an outer surface of the tobacco rod while the tobacco rod is in the drum link-up assembly. Dearsley



discloses the filter assembly machine directly attached to a cigarette making machine. (col. 3, lines 57-67) Even if the stationary table bed 82 and kicker plate 83 of Dearsley is construed as a drum link-up assembly as recited in Claim 29, the Official Action has failed to indicate any teaching in Dearsley of a laser perforating apparatus adapted to burn one or more holes in an outer surface of the cut lengths of cigarette rod F. As such, the cited combination does not disclose all the claim features recited in Claim 29 and the combination cannot render Claim 29 obvious.

Claims 35 and 36 are considered patentable at least because they depend from Claim 29 which is patentable. As stated in MPEP §2143.03, "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Accordingly, Applicants respectfully request withdrawal of this ground of rejection.

The Official Action rejects Claims 30, 31, 32, 33, and 37 under 35 U.S.C. §103(a) as allegedly unpatentable over Dearsley, what the Official Action terms "the applicant's prior art", and in further view of U.S. Patent No. 4,570,649 to Nichols et al. (hereinafter "Nichols"). The Applicants respectfully traverse this rejection and reconsideration of the claims is requested for at least the following reasons.

Applicants respectfully submit that Claims 30, 31, 32, 33, and 37 depend from Claim 29 and are patentable for at least the reasons that Claim 29 is patentable.

The Official Action rejects Claim 34 under 35 U.S.C. §103(a) as allegedly unpatentable over Dearsley, what the Official Action terms "the applicant's admitted

prior art", and Nichols. The Applicants respectfully traverse this rejection and reconsideration of the claims is requested for at least the following reasons.

Applicants respectfully submit that Nichols does not cure the deficiencies of Dearsley with regard to Claim 29. Claim 34 depending from Claim 29 is patentable for at least the reasons that Claim 29 is patentable.

Based on the foregoing, the Applicants respectfully request the rejection of Claims 29-37 be withdrawn and the claims reconsidered.

### ***New Claims***

New independent Claim 60 is a combination of Claims 29 and 35. Claim 60 recites an apparatus that can perforate a tobacco rod through thick paper and tobacco mat because the laser is directed on the tobacco rod in combination with the drum link-up assembly and the combining apparatus. The claimed apparatus is useful for making a complicated tobacco rod structure. The drum link-up assembly working in combination with the laser perforating apparatus and combining apparatus working in combination with the laser perforating apparatus recited in Claim 60 can be used for execution at high speed (e.g., 4000 to 5000 tobacco rods or cigarettes per minute (paragraph [0168])). The combination is clearly not taught or suggested by the prior art. Claim 61 recites the features of Claim 34 and depends from Claim 60 (the combination of Claims 29 and 35). The combination of the additional features is also clearly not taught or suggested by the prior art.

**Conclusion:**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.


Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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